PROJECT DESCRIPTION	В.	EQUIPMENT TO BE FURNISHED AND/OR INSTA	ALLED BY THE CONTRACTOR	PHASE CHART
I. GENERAL	ITEM NO.	DESCRIPTION	QUANTITY	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
This project involves the reconstruction of an existing Traffic Control Signal with interconnect at the intersection of MD 528 and 74th Street in Ocean City, Worcester County, There is a	8020	Furnish and install breakaway	1 EA	
Firehouse Hazard Identification Beacon on the southbound approach of MD 528. The existing span wire signal shall be replaced with a new mast arm signal. Video detection shall be used for all approaches. MD 528 is assumed to run a north-south direction.	8021	pedestal pole (10'). Remove and dispose of existing material and equipment per assignment.	1 EA	
II. INTERSECTION OPERATION	8024	Furnish and install 18 pole w/ special 15' "T" 50'/60' twin	1 EA	PHASE 1 & 5 ←G-/R ←G-/R R DARK DARK DARK ←G-/R R R FL/R FL/R R R R DW
1. The intersection shall continue to operate in a NEMA six-phase, semi-actuated mode, with the MD 528 approaches running concurrently. The Exclusive/Permissive left	8027	mast arms. Disconnect, pull back and	1310 L.F.	PHASE 1 & 6
turn phases shall be maintained for both approaches of MD 528. The pedestrian phase with pushbutton actuation across the south leg of MD 528 shall remain in operation. A new pedestrian phase with pushbutton actuation across the north leg of MD 528 shall be provided. The	8029	reroute cable. Detectable warning system	48 SF	1 & 6 CHANGE
74th Street approaches shall also continue to run concurrently. The firehouse pre emption shall remain in operation.	8033	(truncated domes). Furnish and install No. 6	565 L.F.	PHASE 2 & 5 R R R DARK
2. A full-traffic-actuated, eight-phase controller with video interface and all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be installed at this intersection.	8037	AWG stranded bare copper ground wire. Furnish and install 3"	1 EA	PHASE 2 & 6 G G DARK DARK G G G R FL/R FL/R R R R R DW DW DW DW DW
III. SPECIAL NOTES	8038	weatherhead. Furnish and install 3" schedule	155 L.F.	2 & 6 CHANGE Y Y Y DARK DARK Y Y Y R FL/R R R R R DW DW DW DW DW T
 The Contractor shall be responsible for terminating all signal cables, excluding interconnect, to the appropriate terminals and shall properly 	0030	80 rigid polyvinyl chloride conduit – bored.		PHASE 4 & 8 R R R DARK DARK R R R G FL/R FL/R G G G G G DW DW <t< td=""></t<>
label each cable.	8040	Furnish and install 2" schedule 80 rigid polyvinyl chloride - trenched.	50 L.F.	PHASE 4 & 8 ALT R R DARK DARK R R R G FL/R FL/R G G G G WK WK WK WK WK
2. All controller cabinet wiring will be performed by the S.H.A. Signal Shop Contact Mr. Ed Rodenhizer at (410) 787-7650'seventy-two hours in advance of intended work.	8041	Furnish and install 3" schedule 80 rigid polyvinyl chloride – trenched. (Note: includes	105 L.F.	PED CLEARANCE R R DARK DARK R R R G FL/R FL/R G G G G FL/DW FL/DW FL/DW FL/DW
3. All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility		30' PVC riser).	70	4 & 8 ALT CHANGE R R R R R R R R R R R FL/R FL/R FL/R Y Y Y Y DW <
prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.	8042	Furnish and install 4" schedule 80 rigid polyvinyl chloride – trenched.	70 L.F.	PRE EMPT R
4. Upon completion of this project, the Contractor shall notify Mr. Robert Snyder at	8044	Furnish and install 4" schedule 80 rigid polyvinyl chloride -	60 L.F.	PRE EMPT CHANGE R R R R R R Y-/G 4-Y-/G G R 12"Y 12"Y R R R DW DW DW DW DW T
(410) 787–7631 to arrange for the phone line installation. The Contractor is to provide Mr. Robert Snyder with the nearest street address, zip code and phone number.	8047	slotted. Furnish and install electrical utility service equipment	1 EA	FLASHING OPERATION FL/Y FL/Y DARK DARK FL/Y FL/Y FL/Y FL/Y FL/Y FL/R FL/R FL/R FL/R FL/R FL/R FL/R DARK DARK DARK DARK DARK DARK DARK DAR
EQUIPMENT LIST	•	(120/240 V, 1 phase 3 wire system).		
A. EQUIPMENT TO BE SUPPLIED BY S.H.A	8048	Furnish and install electrical cable 1-conductor No. 4 AWG THHN/THWN.	100 L.F.	WIRING DIAGRAM
ITEM NO. DESCRIPTION QUANTITY	8054	Furnish and install electrical handhole.	4 EA	hh
9042 Controller ASC II with telemetry 1 EA 9044 Controller cabinet, size "6" 1 EA	8057	Install overhead sign. Furnish and install video	70 S.F. 4 EA	Y,,Z.aa,bb,ee,ff,PT A,B,C,D,E,F,G,H,J,K, WIRING KEY P,Q,R,S,T,U,V,W,X,
9044 Controller cabinet, size "6" 1 EA 9086 Video detection interface 1 EA equipment: 1-4 cameras	8058 8076	detector camera. Furnish and install ground	6 EA	E,G,S,V, X,Y,PT
(To be installed by signal shop). 9571 Sheet aluminum signs to consist of: 70 SF	8077	rod $-\frac{3}{4}$ " × 10'. Furnish and install 8" vehicular	14 EA	C.D.R.U.X.Z
(mast arm mount) D3-2 "74 TH Street" sign, 2 EA	8078	traffic signal head section. Furnish and install 12" vehicular	40 EA	A,B,F,H,J,
(variable x 16") (dual faced). R3-14 MOD "RIGHT LANF/ 2 EA	8084	traffic signal head section Furnish and install electrical	560 L.F.	P,Q,T,W,X, 62211 B N DP&L*PT V OP A C PT V N 02-111 B N 0 5-CONDUCTOR ELECTRICAL
BUSES AND RIGHT TURNS ONLY" sign. (30'x36").		cable - 2 conductor (No. 14 AWG).		C.D.Z K CABLE (NO. 14 A.W.G) R CABLE (NO. 14 A.W.G)
R10-12 "LEFT TURN YIELD 2 EA ON GREEN (BALL)" sign, (36" × 42").	8086	Furnish and install electrical cable – 5 conductor (No. 14 AWG).	1210 L.F.	T) 2-CONDUCTOR ELECTRICAL
W11-8(1) "FIREHOUSE 1 EA SIGNAL)" sign, (36" × 72").	8087	Furnish and install electrical cable - 7 conductor (No. 14 AWG).	1530 L.F.	C,D,O,Z C,D,O,Z C,D,O,Z C,D,O,Z
(30 × 12).	8091	Pedestrian pushbutton and	2 EA	C,O,Z K X - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.) Y PRE MANUFACTURED CAMERA TO
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR	•	R10-4(1) sign. (Note: Sign to read "PUSHBUTTON TO CROSS MD_528".)		Z Z CONTROLLER CABLE (200') A A A A A A A A A A A A A A A A A A A
ITEM NO. DESCRIPTION QUANTITY	8097	Install controller and cabinet base mount.	1 EA	A,M,bb B CC) EXISTING 12-PAIR VOICE GRADE
1001 Maintenance of traffic per assignment. 3 EA	8099A	Furnish and install 16" LED countdown pedestrian signal head.	4 EA	A,B,M,bb A,B,F,H,J,P,Q, T,W,X,dd,bb,ee,ff a,B,F,H,J,P,Q, T,W,X,dd,bb,ee,ff ee RELOCATED 12-PAIR VOICE GRADE ff INTERCONNECT CABLE
2001 Class 2 Excavation. 5 C.Y.	8081	CUT, CLEAN, GALVANIZE SIGNAL STRUCTORE.	I EA	P.T.X.ee 3
2002 Test Pit Excavation 6 C.Y. 5005 12" white heat applied			EXIST 1/ 77	A,B,F,H, C NORTH TO C
permanent preformed 965 L.F. thermoplastic pavement marking.				EXISTING OVERHEAD PT - PROPOSED TELEPHONE DROP
6001 Furnish and install depressed curb and gutter. 60 L.F.	C.	EQUIPMENT TO BE REMOVED		dd — P.T.X — L — W 62229 94197
5002 Standard Type A Combination	the controller	Il remove the controller and all auxilliand cabinet. The cabinet and all other remover of the contractor.	ry equipment from ed signal materials are to	H F.H.aa SHA#: WOHZHAGY/BOH TOD#: AT355-06
6004 4" concrete sidewalk.	he contact persons	s for District #1 are as follows:		MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
8001 Furnish and install concrete for signal foundation 14.0 V Assistant (ofiell District Engineer 10) 677-4040	- Traffic Mr. Ed Rodenhizer Signal Shop 410-787-7652		Office of Traffic & Safety
	District Engineer	- Maintenance Mr. Sonny Bailey		TRAFFIC ENGINEERING DESIGN DIVISION
8009 Pre-manufactured camera to controller (300' length) cable 2 EA Mr. Bruce f	10) 543-6715	410-787-7670		MD 528 @ 74th St
8014 Furnish and install 16 pole W/ special 15' "T" 38' mast arm. Cut To 38' 1 EA Phone: (4)	District Engineer 10) 677-4082	- Utility The power company reprint Rodney Bain Conectiv	esentative is:	STREET TRAFFIC STUDIES, LTD. DRAWN BY: RC / F.A.P. NO TS NO TS NO.
Chief, Tra	d L. Daff, Sr. ffic Operations Di	2530 N. Salisbury Blvd		Gien Burnie, ND 2/06/ CHECKED BY: RRZ S.H.A. NO. AT3555185 1421E-GI SHEET NO. Ph (4(0) 590-5500 SCALE: NONE COUNTY: Worcester T.I.M.S. NO.
Phone: (4'	10) 787-7630	rnone: 410 860-6242		4667g1.dgn WT-51 DATE: 11-4-04 LOG MILE: 23052804.01 9398 Z OF Z

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